

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A medical solution comprising:

a first single solution comprising bicarbonate and carbonate in such proportions that ~~the a~~ partial pressure of carbon dioxide,  $\text{CO}_2$ , in the first single solution is of the same order of magnitude as ~~the a~~ partial pressure of carbon dioxide,  $\text{CO}_2$ , of in the atmosphere[[,]]; and

a second single solution comprising an acid,

wherein said first and second single solutions[[,]] are mixed after terminal sterilization ~~and up on use, are to be mixed~~ to form a final solution, wherein said second single solution has a pH of 1.0 - 1.5[[,]] and ~~wherein the~~ said final solution has a pH of 7.0 - 7.6.

2. (Currently Amended) A medical solution according to claim 1, where

said first single solution has a pH of 10.1 - 10.5, ~~preferably 10.3.~~

3. (Currently Amended) A medical solution according to ~~any of~~ claim 1

or 2, wherein said second single solution has a pH of 1.3.

4. (Currently Amended) A medical solution according to ~~any one of the~~ previous claims claim 3, wherein the second single solution comprises HCl.

5. (Currently Amended) A medical solution according to ~~any one of the~~ previous claims claim 1, wherein the medical solution further comprises one or more osmotic agents.

6. (Currently Amended) A medical solution according to claim 5, wherein said one or more osmotic agents are chosen among from the group including: glucose, glucose polymers, glycerol, xylitol, fructose, amino acids, peptides, proteins, amino sugars, N-acetyl glucose amine (NAG), or combinations thereof.

7. (Currently Amended) A medical solution according to claim 5, wherein the said one or more osmotic agents, before being mixed into the final solution, are arranged in said second single solution before said second single solution is mixed with said first single solution to form the final solution.

8. (Currently Amended) A medical solution according to claim 5, further comprising a third single solution, and wherein said one or more osmotic agents agent, before being mixed into said final solution, are arranged in a said third single solution, prior to the formation of the final solution.

9. (Currently Amended) A medical solution according to claim 8, further comprising a fourth single solution, and wherein said one or more osmotic agent agents also are arranged in a said fourth single solution.

10. (Currently Amended) A medical solution according to claim 8 or 9, wherein said one or more osmotic agents in said third and/or fourth single solution is comprise glucose and/or glucose polymers giving rise to glucose degradation products (GDPs) during terminal sterilization and/or storage, and wherein said third and/or fourth single solutions comprise an acid and has have a pH of at least 1.8, preferably at least 2.9, and a pH of at most 2.6, preferably at most 2.5, and most preferably at most 2.3.

11. (Currently Amended) A medical solution according to ~~anyone of the previous claims~~ claim 1 or 5, wherein the medical solution further comprises one or more electrolytes.

12. (Currently Amended) A medical solution according to claim 11, wherein said one or more electrolytes comprise one or more of the ions of sodium, calcium, potassium, magnesium, and/or chloride.

13. (Currently Amended) A medical solution according to claim 11 or 12, wherein ~~said~~ one or more electrolytes, ~~before being mixed into the final solution, is/are~~ are arranged in said first single solution, prior to the formation of the final solution.

14. (Currently Amended) A medical solution according to ~~any of claims 11-13~~ claim 11, wherein ~~said~~ one or more electrolytes, ~~before being mixed into the final solution, is/are~~ are arranged in said second single solution, prior to the formation of the final solution.

15. (Currently Amended) A medical solution according to ~~any of claims 11-14~~ claim 9, further comprising one or more electrolytes, and wherein said one or more electrolytes, ~~before being mixed into the final solution, is/are~~ are arranged in said third single solution and/or said fourth single solution, prior to the formation of the final solution.

16. (Currently Amended) A medical solution according to ~~any one of the previous claims~~ claim 1, wherein the different first and second single solutions are provided in different first and second compartments in a multi-compartment bag before being mixed to form the final solution.

17. (Currently Amended) A method for producing a medical solution according to ~~any of the previous claims~~ claim 1, said method comprising:

providing said first and second single solutions in separate compartments~~[,]~~;  
and thereafter

~~terminal~~ terminally sterilizing said first and second single solutions.

18. (Currently Amended) A method according to claim 17, wherein the ~~said step of terminally sterilizing terminal sterilization is comprises~~ heat sterilization and/or radiation sterilization.

19. (Currently Amended) A method according to ~~any of claims~~ claim 17-18, wherein the ~~said step of terminally sterilizing terminal sterilization is comprises~~ heat sterilization at a temperature of at least 100°C, ~~preferably at least 121°C~~.

20. (Currently Amended) A method according to ~~any of claims 17-19~~ claim 17, wherein said first and second single solutions, after terminal sterilization ~~and up on use~~, are mixed to form a final solution.

21. (Currently Amended) A method according to ~~any of claims 17-19~~ claim 27, wherein said first, second, and third single solutions, after terminal sterilization ~~and up on use~~, are mixed to form a final solution.

22. (Currently Amended) A method according to ~~any of claims 17-19~~ claim 28, wherein said first, second, and fourth single solutions, after terminal sterilization ~~and up on use~~, are mixed to form a final solution.

23. (Currently Amended) A method according to ~~any of claims 17-19~~ claim 28, wherein said first, second, third, and fourth single solutions, after terminal sterilization ~~and up on use~~, are mixed to form a final solution.

24. (Currently Amended) A method according to ~~any of claims 17-23~~  
~~claim 17, wherein the different first and second~~ single solutions are provided in ~~different~~  
~~first and second~~ compartments in a multi-compartment bag before being mixed to form  
the final solution.

25. (Currently Amended) A multi-compartment bag comprising the  
medical solution according to ~~any one of claims 1-16, 8, or 9.~~

26. (Canceled)

27. (New) A medical solution according to claim 8, wherein the first, second,  
and third single solutions are provided in first, second, and third compartments in a  
multi-compartment bag before being mixed to form the final solution.

28. (New) A medical solution according to claim 9, wherein the first, second,  
third, and fourth single solutions are provided in first, second, third, and fourth  
compartments in a multi-compartment bag before being mixed to form the final solution.

29. (New) A method according to claim 21, wherein the first, second, and third  
single solutions are provided in first, second, and third compartments in a multi-  
compartment bag before being mixed to form the final solution.

30. (New) A method according to claim 23, wherein the first, second, third,  
and fourth single solutions are provided in first, second, third, and fourth compartments  
in a multi-compartment bag before being mixed to form the final solution.